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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,025	06/23/2003	Hibourahima Camara	FIS920030111	1024
29940 7590 03/20/2007 RATNER & PRESTIA SUITE 301, ONE WESTLAKES, BERWYN P.O. BOX 980 VALLEY FORGE, PA 19482-0980			EXAMINER ZHENG, EVA Y	
			ART UNIT 2611	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	
3 MONTHS			03/20/2007	
			DELIVERY MODE PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/604,025

Applicant(s)

CAMARA ET AL.

Examiner

Eva Yi Zheng

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/20/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,7 and 8 is/are rejected.
- 7) ☒ Claim(s) 3-6 and 9-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Amendment, filed 12/20/06, with respect to the rejection(s) of claim(s) 1-12 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 and 7 are rejected under 35 U.S.C. 102(e) as being unpatentable by Deas et al (US 2003/0043900).

a) Regarding to claim 1, Deas et al disclose a data transceiver comprising:

input means for supplying a differential input data signal (block 23 , DATA IN and block 3 in Fig. 1);

a transmitter (device A in Fig. 1);

a receiver (device B in Fig. 1);

a data link between said transmitter and said receiver (transmission lines and

PCB in Fig. 1); and

output means for receiving a differential output data signal (39 received differential signal and DATA OUT in Fig. 1; [0042]);

- said transmitter for:

- (a) receiving the differential input data signal from said input means (7 in Fig. 1; signal is differential signal from the clock generator [0082]; DATA IN is also inherent as differential signal) ,

- (b) receiving a feedback signal from said receiver (43 return channel in Fig. 1),

and

- (c) equalizing, in response to the received feedback signal, a data eye of the differential input data signal (9 in Fig. 1; abstract);

- said receiver for:

- (a) receiving the differential input data signal from said transmitter (33 in Fig. 1),

- (b) determining an extent of the data eye of the differential input data signal ([0042]),

- (c) developing the feedback signal in response to the determination of the extent of the data eye of the differential input data signal (43 in Fig. 1; abstract); and

- (d) supplying the differential output signal to said output means (DATA OUT in Fig. 1), and

- said data link for conducting:

- (a) the differential input data signal from said transmitter to said receiver (clock generator generate differential signal [0082]), and

(b) the feedback signal from said receiver to said transmitter (43 in Fig. 1), and including:

(a) a first line for conducting the data positive signal of the differential input data signal (essential and inherent in differential signal [0082]), and

(b) a second line for conducting the data negative signal of the differential input data signal (essential and inherent in differential signal [0082]).

b) Regarding to claim 7, Deas et al disclose a method of equalizing a data eye of a differential input data signal conducted from a first location to a second location through a data link, said method comprising the steps of:

supplying a differential input data signal to a first location (clock generator 23 and block 3 in Fig. 1 generate differential signal [0082]);

conducting the differential input data signal from the first location to a second location through a data link (PCB in Fig.1);

determining, at the second location, an extent of the data eye of the differential input data signal (33 in Fig. 1; [0042]);

developing, at the second location and from the determination of the extent of the data eye of the differential input data signal, an indication of the degree of the equalization needed to produce a desired data eye for the differential input data signal (abstract);

conducting, from the second location to the first location, the developed indication of the degree of the equalization (return channel 43 in Fig. 1);

equalizing, at the first location and in response to the indication of the degree of

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the equalization needed to produce a desired data eye for the differential input data signal, the data eye of the differential input data signal (9 in Fig. 1); and

supplying the differential input data signal from the second location (DATA OUT in Fig. 1).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deas et al (US 2003/0043900) in view of Tang et al. (US 6,570,406).

a) Regarding to claims 2 and 8, Deas et al. disclose a data link that conducts differential input data signal from the transmitter to the receiver (PCB in Fig. 1) and all the subject matters above except for the specific teaching of input means for including a serializer for developing parallel format and supplying signal to the transmitter in serial format, and output means for including a deserializer for outputting in serial format.

However, Tang et al., in the same field of endeavor, disclose a transmitter and receiver utilize equalization in a high speed digital communication system, wherein a serializer (306, Fig. 3A) is couple to the input signal in the transmitter; and a deserializer (326) in output to the receiver output signal. Both serializer and deserializer are common and essential component in equalization system. Therefore, it is obvious to

one of ordinary skill in art to combine the teaching of serializer and deserializer of Tang et al with the adaptive equalization system of Deas et al. By doing so, provide fast and reliable equalization in a high speed digital communication system.

Allowable Subject Matter

6. Claims 3-6 and 9-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eva Y Zheng whose telephone number is 571-272-3049. The examiner can normally be reached on M-F, 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic
Business Center (EBC) at 866-217-9197 (toll-free).

Eva Yi Zheng
Examiner
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March 12, 2007

A handwritten signature in black ink, appearing to read "Chieh M. Fan" with a stylized flourish at the end.

CHIEH M. FAN
SUPERVISORY PATENT EXAMINER